## Message

From: Liang, Yan Ling [Liang.YanLing@epa.gov]

**Sent**: 12/2/2020 7:01:12 PM

To: Nguyen, Thuy [Nguyen.Thuy@epa.gov]
Subject: RE: Anvil container rinsing results summary.

50,000 ppt or 50 ppm

**From:** Nguyen, Thuy < Nguyen. Thuy@epa.gov> **Sent:** Wednesday, December 2, 2020 1:58 PM **To:** Liang, Yan Ling < Liang. YanLing@epa.gov>

Subject: RE: Anvil container rinsing results summary.

0.05 ng/ml - $\rightarrow$ 500 ppt?

From: Liang, Yan Ling < Liang. YanLing@epa.gov>
Sent: Wednesday, December 2, 2020 1:52 PM
To: Nguyen, Thuy < Nguyen. Thuy@epa.gov>

Subject: RE: Anvil container rinsing results summary.

Just as a rough estimate, the background levels are 0.05 ng/mL or less depending on the PFAS. Our lowest standard is 0.02 ng/mL. Because the instrument has not been PFAS-proofed, we can say our detection limit is around 0.05-0.1 ng/mL for right now.

From: Nguyen, Thuy < Nguyen. Thuy@epa.gov>
Sent: Wednesday, December 2, 2020 1:47 PM
To: Liang, Yan Ling < Liang. YanLing@epa.gov>
Cc: Qian, Yaorong < qian. yaorong@epa.gov>

Subject: RE: Anvil container rinsing results summary.

Also what is the background level, and what are our instrument detection limits

Thuy

From: Nguyen, Thuy

**Sent:** Wednesday, December 2, 2020 1:44 PM **To:** Liang, Yan Ling <<u>Liang.YanLing@epa.gov</u>> **Cc:** Qian, Yaorong <<u>qian.yaorong@epa.gov</u>>

Subject: RE: Anvil container rinsing results summary.

Yan

This is the report with get from R1 lab on the Anvil product (different lot).

I know our results in from the rinsate of the container. So it would make sense that we find the same compounds as the other lab did, right? It looks like they found more than we did

Thuy

From: Liang, Yan Ling <<a href="mailto:liang.YanLing@epa.gov">liang.YanLing@epa.gov</a>
Sent: Wednesday, December 2, 2020 11:00 AM
To: Nguyen, Thuy <<a href="mailto:Nguyen.Thuy@epa.gov">Nguyen.Thuy@epa.gov</a>
Cc: Qian, Yaorong <<a href="mailto:qian.yaorong@epa.gov">qian.yaorong@epa.gov</a>
Subject: Anvil container rinsing results summary.

Hi Thuy.

Here is a summary of the container rinsing results:

Several PFAS compounds were found to be amenable to leaching with methanol on the interior and exterior of the Anvil 10+10 container. PFAS compounds PFPeA and PFBA were found in the 30-200 ng levels and PFHpA and PFHxA were found in 7-50 ng levels in the 50 mL methanol leachate.

More details are provided below.

Method: the container was leached for PFAS using methanol after emptying and washing of the container with laboratory detergent and rinsing with large amounts of water. Leaching was performed with 50 mL of methanol.

- PFPeA was leached from both the interior (~30 ng) and exterior (~100 ng) in significant quantities.
- PFPeS was not found in interior or exterior leaching above background levels.
- PFBA was leached from both the interior (~80 ng) and exterior (~200 ng) in significant quantities.
- PFTeDA was not found in interior or exterior leaching above background levels.
- PFTrDA was found in small amount in the exterior leaching sample, none found in interior leaching sample.
- PFDoA was found in moderate amount in the exterior leaching sample, none found in interior leaching sample.
- PFUdA was found in moderate amount in the exterior leaching sample, none found in interior leaching sample.
- PFDA was found in moderate amount in the exterior leaching sample, small amount found in interior leaching sample.
- PFDS was not found in interior or exterior leaching above background levels.
- PFOS was not found in interior or exterior leaching above background levels.
- PFNA was found in moderate-high amount in the exterior leaching sample, moderate amount found in interior leaching sample.
- PFNS was not found in interior or exterior leaching above background levels.
- PFOA was found in moderate-high amount in the exterior leaching sample, moderate amount found in interior leaching sample.
- PFHpS was not found in interior or exterior leaching above background levels.
- PFHxS was not found in interior or exterior leaching above background levels.
- PFHpA was leached from both the interior ( $\sim$ 7 ng) and exterior ( $\sim$ 22 ng) in significant quantities.
- PFHxA was leached from both the interior (~50 ng) and exterior (~17 ng) in significant quantities.
- PFBS was not found in interior or exterior leaching above background levels.
- PFDoS was not found in interior or exterior leaching above background levels.
- PFHxDA was found in small amount in the exterior leaching sample, none found in interior leaching sample.
- PFODA was not found in interior or exterior leaching above background levels.